

Academy Speaker Series

... shedding light on emerging water issues

a California Streams Seminar

A Presentation of the California Water Board Academy Speaker Series

Date & Time: July 23, 2007, 9:00 a.m. to 4:00 p.m.

Location: Byron Sher Auditorium, Cal/EPA Building,
1001 I Street, Sacramento

The Water Board Academy is hosting five stream experts who will present current research about stream concerns and stream improvement possibilities in California. Given the diversity of the topography, geology, geography, land use, climatic conditions and manmade alterations within the state of California it is not possible to define one method for ensuring the stability of wadeable streams within the State. When healthy, these smaller streams provide critical habitat for fish and aquatic macroinvertebrates, and offer effective pollutant assimilation benefits. The seminar will explore the relationships among stream hydrology, hydrogeomorphology, and riparian and aquatic ecology, in the context of stream corridor stability and stream restoration efforts.

The Academy Speaker Series is open to the public at no cost and will be webcast for anyone who cannot attend in person. A more detailed agenda plus more information and how to enroll for the Seminar is available at: <http://waternet/training/> or <http://www.waterboards.ca.gov/academy/>.

Webcast Information: <http://www.calepa.ca.gov/broadcast/> and click on the broadcast link. To submit questions or comments while viewing the webcast, send e-mail comments to: auditorium@calepa.ca.gov

Agenda

9:00 am:

Mr. Greg Gearheart, P.E., SWRCB: Welcome and introductory remarks



9:15 am:

Dr. Desiree Tullos, Oregon State University: The Science and Practice of River Restoration. Dr. Tullos will: present definitions, history, and current trends of river restoration in the US; focus on issues specific to western states, including dam removal, channel reconfiguration, and environmental flows; discuss performance evaluation of restoration projects; and evaluate river restoration in an inconclusive hydrologic and regulatory framework.



10:05 am

Dr. Lisa Thompson, University of California Davis: Stream Ecology – From the Eye of the Fish and California Stream Ecology. Dr. Thompson will present current research of cold-water fish in wadeable streams in several watersheds in northern and central California and relate fish distribution and habitat use to factors such as temperature, flow regime, water year, large wood (debris), pools, cover, and substrate. These factors influence the abundance of benthic macroinvertebrates as important food sources for stream fish. Restoration of anadromous fish populations and stream habitat should be considered at the watershed scale, incorporating fish passage, seasonal shifts in habitat use due to migration and temperature changes, and inter-annual shifts related to water year.



10:55-11:45

Dr. Chris Bowles, PWA, Ltd., Sacramento: The Importance of Floodplains to Riverine Ecosystems and Flood Management. Highlighting the relationship between ecology and stream functionality, Dr. Bowles' presentation will provide an overview of the importance of floodplains for ecosystem and flood management from a physical process perspective. Traditional, single focus approaches to floodplain management must be developed into holistic, multi-objective approaches in order to maximize the potential, not only for our ecosystems, but for more sustainable flood management and planning.

11:45-1:00 Lunch (on your own)



1:00 – 1:50

Dr. Stanley W. Trimble, UCLA: Stream Stability: Trees vs. Grass on Stream Banks – Some Geomorphological and Other Considerations. A contentious element of riparian management is whether trees or grass promote greater stream stability. This review looks at pre-existing conditions and examines stream morphology, bank and floodplain scour, hydroclimatology, stream flood regime, and the inherent strength of banks. Dr. Trimble will also help to distinguish between features whose potential for stream bank protection have been demonstrated and those that require more research.



1:50 – 2:40

Dr. Gretchen Coffman, Marine Science Institute, University of California: Invasive plant species and revegetation along rivers, streams and levees in California. This presentation will review the problem of plant invasion in streams and riparian ecosystems. Strategies for control and specific removal methods for the most invasive riparian plants in California, the cost and timing of invasive plant removal, riparian re-vegetation, stream restoration and levee stabilization will be discussed. Dr. Coffman will discuss monitoring, performance criteria and adaptive management.

2:40 – 3:10

Mr. Greg Gearheart, P.E., SWRCB: Implications for State and Regional Water Boards. Greg Gearheart will share his observations on how our core regulatory systems behave in relation to the Water Boards' mission.

3:10 – 4:00

Panel Discussion with Questions and Answers
Moderated panel discussion by all the speakers on the topic of 'California Stream Protection for the 21st Century - Where do we go from here?'

